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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,847	06/20/2003	Keith C. Hong	008-02	8487
27569	7590	01/24/2006		
PAUL AND PAUL 2000 MARKET STREET SUITE 2900 PHILADELPHIA, PA 19103			EXAMINER TSOY, ELENA	
			ART UNIT 1762	PAPER NUMBER

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/600,847	HONG ET AL.	
	Examiner Elena Tsoy	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 December 2005.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 26 and 27 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

***Request for Reconsideration***

Request for Reconsideration filed on 12/19/2005 has been entered. Claims 1-27 remain pending in the application. Claims 26-27 are withdrawn from consideration as directed to a non-elected invention.

***Election/Restrictions***

Applicant's election with traverse of Group I, claims 1-25 in the reply filed on 12/19/2005 is acknowledged. The traversal is on the ground(s) that the use of roofing granules for "outdoor surfacing other than roofing" proposed by the Examiner is not materially different than that of the Group II claims, namely it does not appear to be a *specific* use. This is not found persuasive because according to MPEP § 806.05(h)), for the inventions to be shown to be distinct, there is no requirement of showing the *specific* use. Since the use of the product in NON-roofing outdoor surfacing is a process that is materially different from the roofing surfacing, as required by MPEP § 806.05(h)), the inventions are distinct.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1-2, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joedicke (US 20040110639) for the reasons of record set forth in paragraph 2 of the Office Action mailed on 8/16/2005.

3. Claims 3-11, 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joedicke '639 in view of JP 60147276 for the reasons of record set forth in paragraph 3 of the Office Action mailed on 8/16/2005.

4. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joedicke '639 in view of JP 60147276, further in view of McMahon (US 3,507,676) for the reasons of record set forth in paragraph 4 of the Office Action mailed on 8/16/2005.

5. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joedicke '639 in view of JP 60147276, further in view of Hojaji et al (US 4430108) for the reasons of record set forth in paragraph 5 of the Office Action mailed on 8/16/2005.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Joedicke (US 4378408) in view of Joedicke '639 for the reasons of record set forth in paragraph 6 of the Office Action mailed on 8/16/2005.

***Response to Arguments***

7. Applicants' arguments filed 12/19/2005 have been fully considered but they are not persuasive.

(A) Applicants state that the presently claimed invention was reduced to practice prior to November 27, 2002, the earliest effective date of U.S. Patent Publication 2004/01 10639, Application No. 10/717,836 ("Joedicke \$639"), relied upon by the Examiner either alone or as a primary reference taken in combination with other references, in rejecting claims 1-16 under 35

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U.S.C. 103(a). Applicants respectfully traverse each such rejection, and request reconsideration and withdrawal of each reference, because Joedicke '639 is not prior art with respect to the presently claimed invention.

The Applicants' statement of reduction to practice prior to November 27, 2002 is NOT sufficient. The Applicants should provide Affidavit 37 CFR 1.131 with the evidence of a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of Joedicke '639 to establish priority.

(B) Applicants state that Joedicke \$639 claims the benefit of U.S. Provisional Patent Application No. 60/429,464, filed November 27, 2002, while Joedicke 1639 itself was filed on November 20, 2003. The disclosure of the provisional application does not fully support Joedicke 639's claims, as acknowledged by the statement appearing at paragraph (00001) that "This application is a continuation-in-part of copending provisional application . . ." (sic, emphasis added). Consequently, to the extent that the corresponding claims are not supported by the provisional application disclosure, the effective filing date of subject matter of those unsupported claims is November 20, 2003, after the filing date of the present application.

The Examiner respectfully disagrees with this argument. The Examiner retrieved the copy of the provisional application 60/429464 and thoroughly examined the disclosure. The disclosure of the provisional application fully supports the Examiner's rejection based on Joedicke '639 (See 60/429,464, pages 1-8).

(C) Applicants argue that contrary to the Examiner's suggestion, one of ordinary skill in the art would be taught away from including pore-forming materials in an inner layer by Joedicke's use of such materials in the outer layer of his granules. Joedicke employs slow-release algaecidal compounds in his inner layer (paragraph 0025), and prefers to avoid the use of algaecide in the outer layer entirely (paragraph 0022). One of ordinary skill in the art would understand that making the inner layer porous would be inconsistent with the use of a slow-release algaecide. If too much algaecide is released too early, the effective life of the algae-resistant granules could be significantly reduced.

The Examiner respectfully disagrees with this argument. Joedicke '639 teaches how to control release rate by incorporating void-forming materials in outer layer, which acts a barrier to a slow-release inner layer. Therefore, one of ordinary skill in the art would understand that a release rate of the two-layer coating can be further increased by incorporating void-forming materials into the slow-release inner layer also, depending on particular use of the final product.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated internal gas forming compounds in both layers of algae-retardant granules of Joedicke with the expectation of providing the desired increased rate of algicide release since increased porosity of the outer layer removes barrier to the inner layer, as taught by Joedicke, and obviously, the increased porosity of the inner layer would increase algicide release *within* the inner layer itself.

(D) Applicants argue that JP '276 discloses a process for applying a primary anti-corrosive glaze layer to a metal plate, then applying a secondary glaze layer for good wear resistance over the first anti-corrosive glaze layer to form a porcelain undercoat, firing the

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undercoat, and then applying a fluororesin coating over the undercoat. Firing the two layers simultaneously provides a diffusion layer between the two coats. Introducing porosity as in Joedicke '639 would defeat JP 276's purpose, because porosity would decrease the corrosion resistance of the undercoating.

The Examiner respectfully disagrees with this argument. Joedicke '639 is a primary reference, and JP '276 is applied to remedy the Joedicke '639 reference not the other way round. Therefore, it is irrelevant whether Joedicke '639 would defeat JP 276's purpose or not. JP '276 is a secondary reference, which is relied upon to show that JP '276 teaches that firing simultaneously two clay-containing glaze layers allows the layers to diffuse into each other and form a diffusion layer having mechanical strength. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the outer layer to unfired inner layer in Joedicke '639 and fired both layers simultaneously with the expectation of providing the desired diffusion layer having mechanical strength, since JP 60147276 teaches that firing simultaneously two clay-containing glaze layers allows the layers to diffuse into each other and form a diffusion layer having mechanical strength.

(E) Applicants argue that JP '276 and Hojaji et al are not properly combinable, as they related to utterly unrelated ads. JP '276 relates to improved porcelain coatings, while Hojaji discloses a method for making foam glass that can be incorporated as a reinforcing material in products such as asphalt shingles, which are known to be conventionally reinforced with fiber, such as glass fiber.

The Examiner respectfully disagrees with this argument. First of all, they both are secondary references combined with primary Joedicke '639 reference. Secondly, they are

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reasonably pertinent to the particular problem with which the applicant was concerned. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The relevance of JP '276 was discussed above in (D).

Hojaji et al is a secondary reference which is relied upon to show suitability of sugar for the use as gas-forming material in glass compositions for roof shingles. It is held that the selection of a known material based on its suitability for its intended use supported a *prima facie obviousness determination* in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

### *Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ELENA TSOY  
PRIMARY EXAMINER  
*ET soy*

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Primary Examiner  
Art Unit 1762

January 20, 2006